



Cisco SDWAN Fundamentals (SDWFND)

What you'll learn on this course

The Cisco Catalyst SD-WAN Operation and Deployment (SDWFND) training provides foundational concepts, business drivers, and an architectural vision of Cisco Catalyst software-defined wide area network (SD-WAN), demonstrating how its core principles enable agile, secure, and cloud-ready WAN solutions to meet modern business demands.

This training also earns you 14 Continuing Education (CE) credits toward recertification

Course duration

- Instructor-led training: 2 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 2 days of web-based classes with hands-on lab practice

How you'll benefit

This class will help you:

- Establish transport-independent WAN for lower cost and higher diversity
- Meet SLAs for business-critical and real-time applications
- Provide end-to-end segmentation for protecting critical enterprise compute resources
- Extend seamlessly into the public cloud
- Optimize the user experience for Software-as-a-Service (SaaS) applications
- Earn 14 CE credits toward recertification

Who should enroll

- Network Engineers
- Network Architects
- Network Designers
- Network Administrators
- Solutions Architects
- Consulting Systems Engineers
- Technical Solutions Architects
- Cisco Integrators/Partners
- Security Engineers
- Network Managers
- Program Managers
- Project Managers
- IT Directors/Chief Information Officers (CIOs)

Technology areas

- Networking

Course Objectives

- Discuss why traditional WANs struggle with modern demands and explain how Cisco Catalyst SD-WAN's architecture and core principles address those challenges
- Identify the main Cisco Catalyst SD-WAN components and explain how their roles and interactions support the overall solution
- Explain and perform secure controller and WAN Edge onboarding using zero-trust principles (ZTP) and secure control channels
- Implement and verify secure data plan operations using IPsec, segmentation, bidirectional forwarding detection (BFD)-based path monitoring, app visibility, and site redundancy
- Configure and verify Overlay Management Protocol (OMP)-based overlay routing, including route advertisement, redistribution, and network segmentation
- Manage Cisco Catalyst SD-WAN device configurations using Configuration Groups, Feature Profiles, Device Templates, and automation workflows for scalable, consistent deployment
- Navigate SD-WAN Manager monitoring dashboards and interpret key metrics and alarms for troubleshooting and operational visibility
- Design and apply centralized and localized policies, including Quality of Service (QoS) and Application Quality of Experience (AppQoE), to control and prioritize traffic across the SD-WAN fabric
- Implement Direct Internet Access (DIA) and cloud optimization features to enhance application experience, traffic flow, and branch security in Cisco Catalyst SD-WAN

Course Outlines

- SD-WAN Evolution and Core Concepts
- Cisco Catalyst SD-WAN Components and Roles
- Initial SD-WAN Deployment
- Secure Data Plan and Segmentation
- Configuration Management and Automation
- Overlay Routing and Integration
- Cisco Catalyst SD-WAN Policies
- Direct Internet Access and Cloud Optimization

Lab Outlines

- Access and Monitor Cisco Catalyst SD-WAN Components
- Deploy and Verify Cisco Catalyst SD-WAN Edge Routers
- Deploy Cisco Catalyst SD-WAN Edge Configuration
- Implement Cisco Catalyst SD-WAN Overlay Routing
- Deploy Cisco Catalyst SD-WAN Policies

Course Prerequisites

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- Familiarity with traditional WAN technologies such as MPLS and internet circuits
- Working knowledge of Cisco IOS networking and concepts, including Open Shortest Path First (OSPF) routing and IPsec tunnels
- Basic understanding of network security concepts and familiarity with operating system interfaces (CLI/GUI) for device interaction

These skills can be found in the following Cisco Learning Offerings:

- Implementing and Administering Cisco Solutions (CCNA)
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)